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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,658	10/03/2003	Harry Eugene Rector		9752
7590	03/23/2005		EXAMINER	
HARRY E. RECTOR			THOMSON, MICHELLE R	
3826 GREENRIDGE DRIVE			ART UNIT	PAPER NUMBER
MONROVIA, MD 21770			3641	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/678,658	RECTOR ET AL.
	Examiner Michelle (Shelley) Thomson	Art Unit 3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 18 February 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) 2-7, 12 and 13 is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1 and 8-11 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4)  Interview Summary (PTO-413).  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Specification***

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 10 recites the limitation "the ammunition cartridge" in line 5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102 & § 103***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Maxwell (US Patent # 4,202,515). Maxwell discloses a command-to-line-of-sight ordnance tracking system comprising a rearward shining beacon (Figure 1) containing two sets of light emitting diodes (column 2, lines 50-55). Although Maxwell does not expressly use the exact terms “non-incendiary directionally illuminated tracer bullet” to define the invention it is noted that the recitation occurs in the preamble and Maxwell discloses the claimed subject matter although by a different name. Although Maxwell does not expressly disclose a power source for the light emitting diode it is inherent that such a source would exist since diodes would not work, and therefore the invention would not work, without such a source.

9. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maxwell as applied to claim 1 above, and further in view of Barron (US Patent # 3,464,863). Although Maxwell does not expressly disclose the ordnance in which the power source is one or more

electrochemical cells, Barron does. Barron teaches a deferred action type battery for use in ordnance systems wherein the power source is an electrochemical cell(s) maintained in a deactivated state by containing electrolyte material in an ampoule (column 3, lines 30-40), electrochemical activation of the electrochemical cell(s) is brought about by electrodes (references 10) being wetted by the electrolyte, initiated by the electrolyte containing ampoule being ruptured, the rupturing being induced by rapid linear acceleration associated with firing the ordnance (column 1, lines 10-20). Maxwell and Barron are analogous art because they are from the same field of endeavor: ordnance systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the deferred action type battery as taught by Barron with the projectile as taught by Maxwell. The suggestion/motivation for doing so would have been to obtain a tracker projectile in which the battery was small and had a long storage life as suggested by Barron at column 1, lines 30-35.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barron and Maxwell as applied to claims 1 and 8-10 above, and further in view of Kurth et al. (US Patent # 4,646,618). Although neither Barron nor Maxwell expressly discloses the launching tube being rifled, Kurth et al. does. Kurth et al. teaches a launch tube with an internal guide surface comprising grooves and lands to impart a controlled spin on launched ordnance. Maxwell, Barron and Kurth et al. are analogous art because they are from the same field of endeavor: ordnance systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the rifled launching tube as taught by Kurth et al. with the projectile as taught by Barron and Maxwell. The suggestion/motivation for doing so would have

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been to obtain a system wherein the projectile had controlled spin and therefore the trajectory could be better controlled.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blackwood et al. (US Patent # 5,425,542), Endriz (US Patent # 4,934,273), Adams (US Patent # 5,222,798), and Manole et al. (US Patent Application Publication 2005/0034627).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Thomson whose telephone number is 703.306.4176 or at 571.272.6884 after 4/5/05. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703.306.4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mrt

*M. Thomson*